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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/965,097	09/28/2001	David F. Moore	IMM120A	7204

22903 7590 01/11/2005

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EXAMINER

WU, XIAO MIN

ART UNIT PAPER NUMBER

2674

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/965,097

Applicant(s)

MOORE ET AL.

Examiner

XIAO M. WU

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7,9-23 and 27-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23,27-29 and 34-46 is/are allowed.
- 6) ☒ Claim(s) 1,2,4-7,9-18,20-22 and 30-33 is/are rejected.
- 7) ☒ Claim(s) 3 and 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/30/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 4-7, 9-18, 20-22, 30-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Kramer (US Patent No. 5,184,319).

As to claims 1, 18, 30, 33, Kramer discloses an apparatus, comprising: a housing; a sensor (e.g. the force sensing platform 502) coupled to the housing (e.g. the glove), the sensor configured to detect a manipulation of at least a portion of the housing and to output sensor signals associated with the manipulation of the portion of the housing (e.g. force-applying platform 501); an actuator (900, Fig. 9) coupled to the housing (e.g. glove), the actuator coupled to the housing, the actuator configured to output a force associated with the sensor signals; and a first flex joint (501, Fig. 5A) and a second flex joint (502, Fig. 5A) being coupled to the housing and the actuator, the first flex joint and the second flex joint configured to transfer the force output from the actuator to the housing to produce a haptic feedback.

As to claims 2, 9, 21, 31, Kramer discloses the force is a rotary force (e.g. motor 900, Fig. 9).

As to claims 4, 20, 32, Kramer discloses the force output by the actuator is associated with an approximately linear motion with respect to the housing, the haptic feedback having a linear direction associated with the linear motion of the actuator (col. 8, lines 18-32).

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As to claim 5, Kramer discloses that the housing included a substantially flat base configured to be in contact with a support surface, the movement of the actuator being substantially perpendicular to the substantially flat based of the housing 9see Fig. 5L).

As to claim 6, Kramer discloses a contact member (520, Fig. 5A) being coupled to the actuator and configured to transmit the inertial force to the user.

As to claim 7, Kramer discloses that the contact member (502) includes at least a portion of a top surface of the housing (see Fig. 5A).

As to claim 11, Kramer discloses the first flex joint (501) includes .a rotating shaft (907, Fig. 9) having a range of motion, the first flex joint includes at least one stop disposed within the range of motion of rotating shaft 9see col. 7, lines 25-35).

As to claim 12, Kramer discloses that the actuator is configured move with a bi-directional action (e.g. the tension can be pulled and released).

As to claim 13, Kramer discloses that the device is a handheld device.

As to claim 14, Kramer discloses that the device functions as a mouse.

As to claims 15 and 16, Kramer discloses the haptic feedback is configured to be associated with a graphical representation display by a host computer.

As to claim 22, Kramer discloses a collar coupled to the actuator (see Fig. 2A).

### ***Response to Arguments***

3. Applicant's arguments filed 8/30/2004 have been fully considered but they are not persuasive.

With respect to claims, 2, 4-18, 20-24 and 26-33, applicant argues that Kramer fails to disclose or suggest "a sensor coupled to the housing, the sensor configured to detect a user

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manipulation of at least a portion of the housing and output sensor signals associated with the user manipulation of the portion of the housing...” as recited in independent claims 1 or 18, and Kramer also fails to disclose or suggest “detecting a user manipulation of a device; sending sensor signals associated with the user manipulation...” as recited in independent claim 30.

These arguments are not persuasive because the force sensing platform 502 of Kramer clearly reads on the limitation of “sensor” or “detecting a user manipulation of a device” as recited in the claims since the force-sensing platform provides force signals to the motor (actuator) force control system. It is believed that the broadly claimed structures are still met by the prior art reference to Kramer.

#### *Allowable Subject Matter*

4. Claims 3 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Claims 23, 27-29, 34-46 are allowed.

#### *Conclusion*

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiao Wu whose telephone number is (703) 305-4721.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard Hjerpe**, can be reached on (703) 305-4709.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**


**(703) 872-9306**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377

xw

January 9, 2005

  
**XIAO WU**  
**PRIMARY EXAMINER**  
**ART UNIT 2674**